Light efficiency:

124 Lumen/Watt

Light quality:

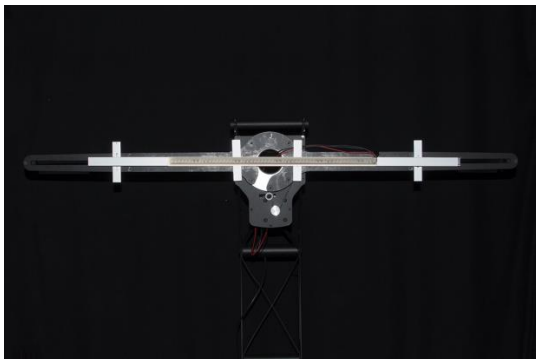
CRI: 0,0

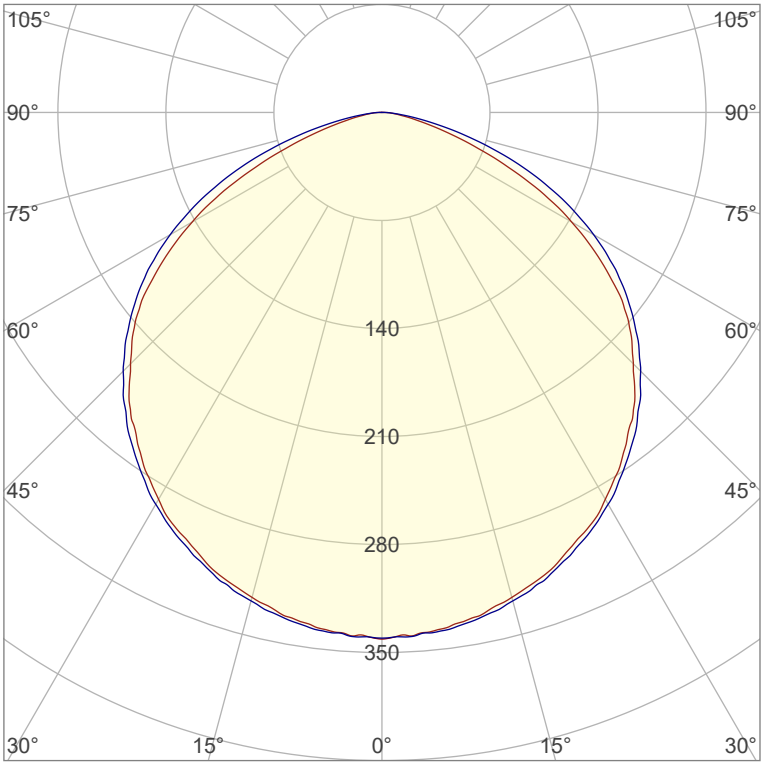
Color temperature:

0 K

Output: 956 lm
Peak: 341 cd

Power: 7,7 W
PF: 1,0





Product name:
Defiant-3_510mm_XXG_Cover-Flat-Transparent

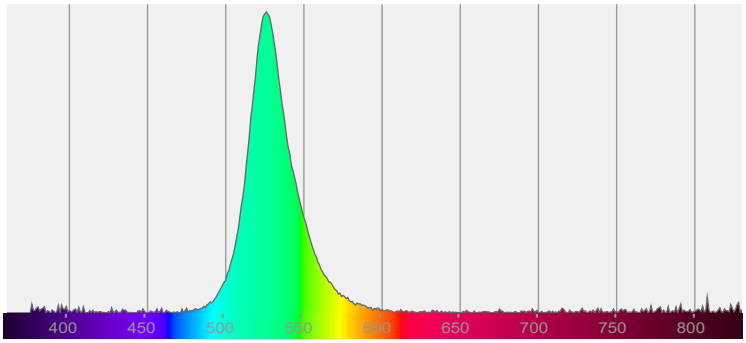
Item number:
NP/L3C/22C/0510/XXG/CFT

Date and time:
06.07.2020 10:19:05

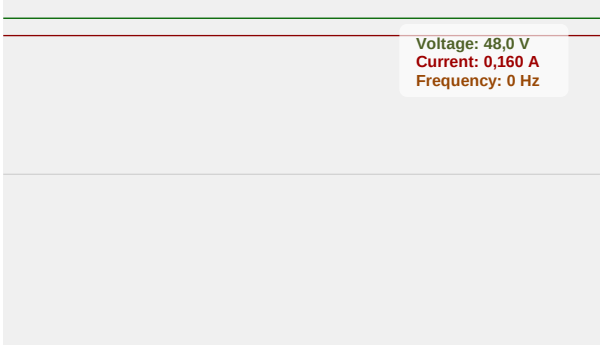
Description:
Toleranzen:
Lumen +/-4%
Candela +/-2,5%
Colour Temp +/-35 K
CRI +/-0,7
Angular Resolution 1 Grad Step
Last Calibration 20.05.2020
Pruefer:
Peter Ulrich
Pruefort:
Lichtlabor
Gaustrasse 13
55411 Bingen am Rhein

CIE 1931
x: 0,200
y: 0,729

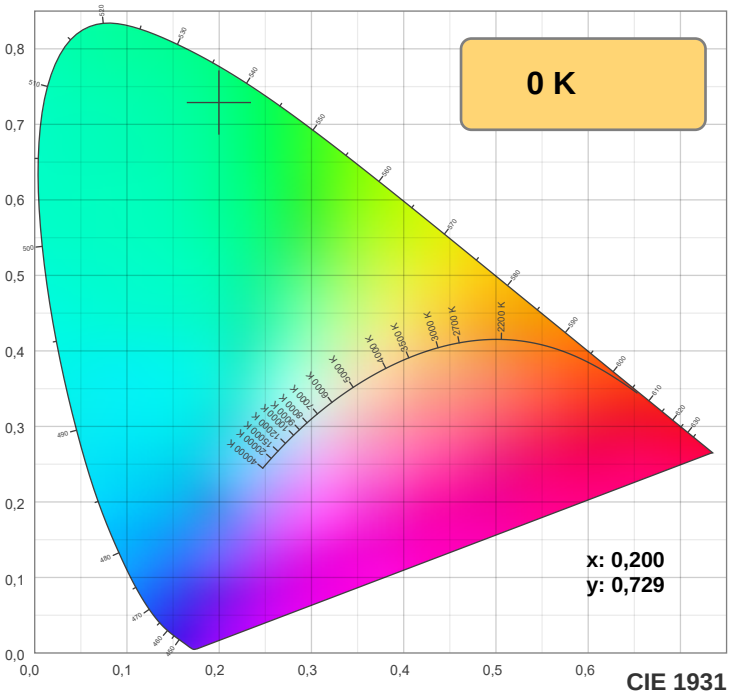
Spectra



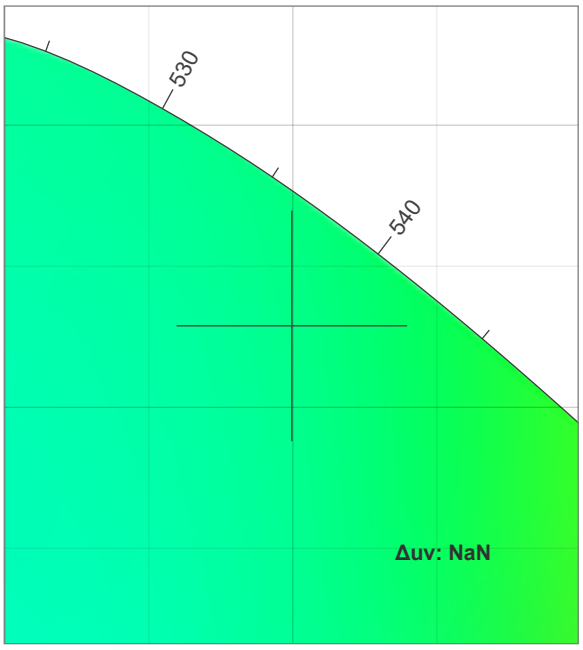
Power



Color details

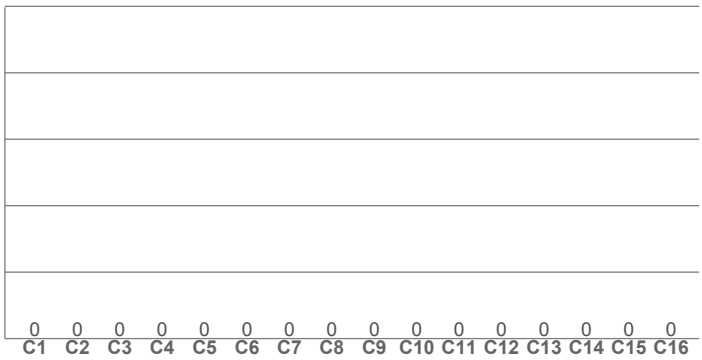


CIE 1931

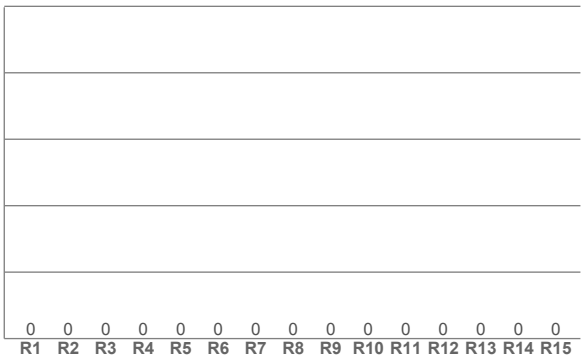


CIE 1931 ZOOM

TM30: 0,0



CRI: 0,0 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

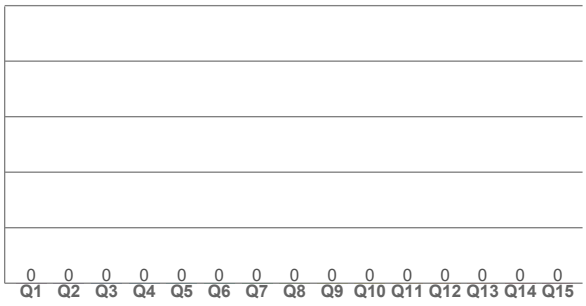
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

CQS: 0,0



Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
0 K	0,0	0,0	0,0	0,0	0,0	0,200	0,729	0,070	0,385	NaN

TM30 details

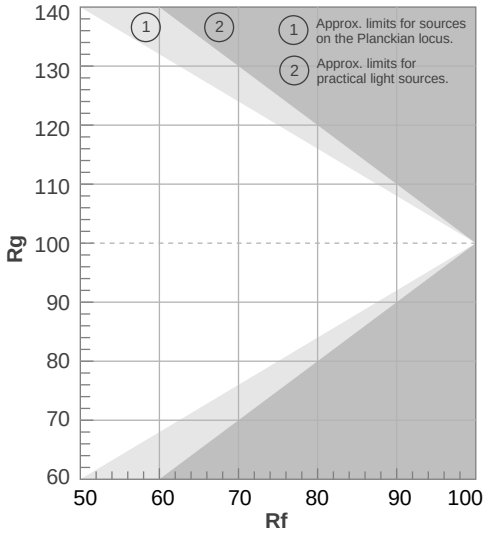
Rf 0,0

Fidelity index Rf

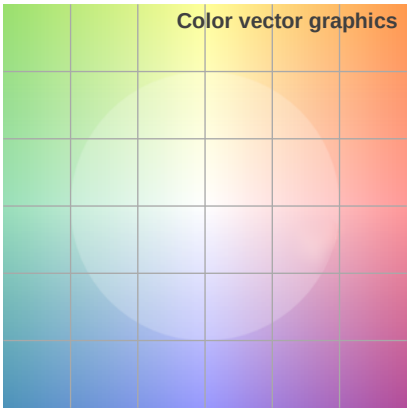
Rg 0,0

Gammut index Rg

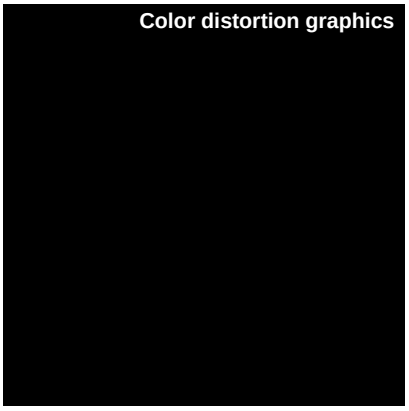
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%

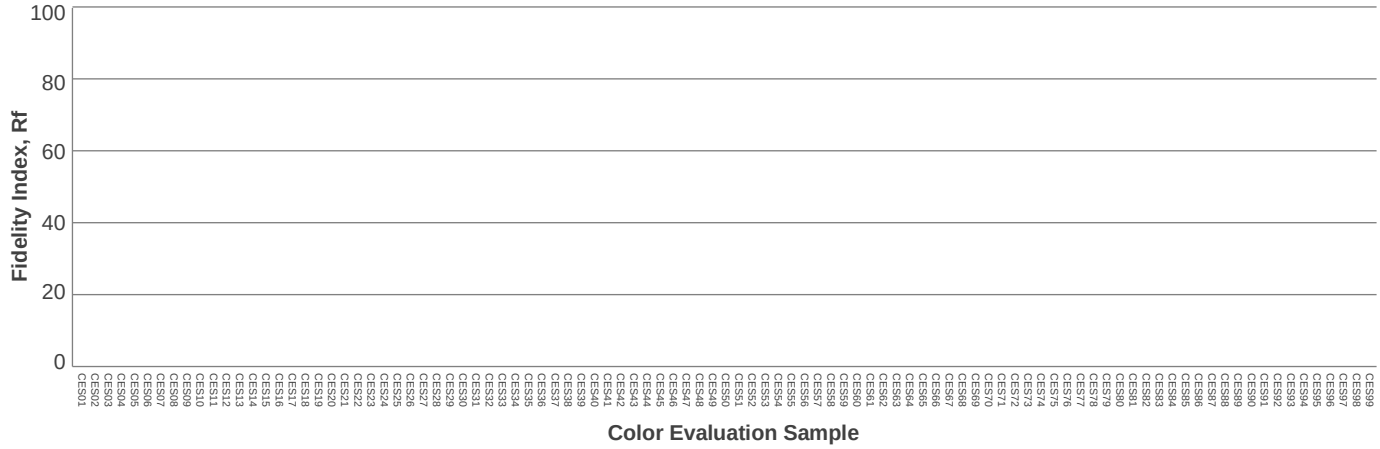




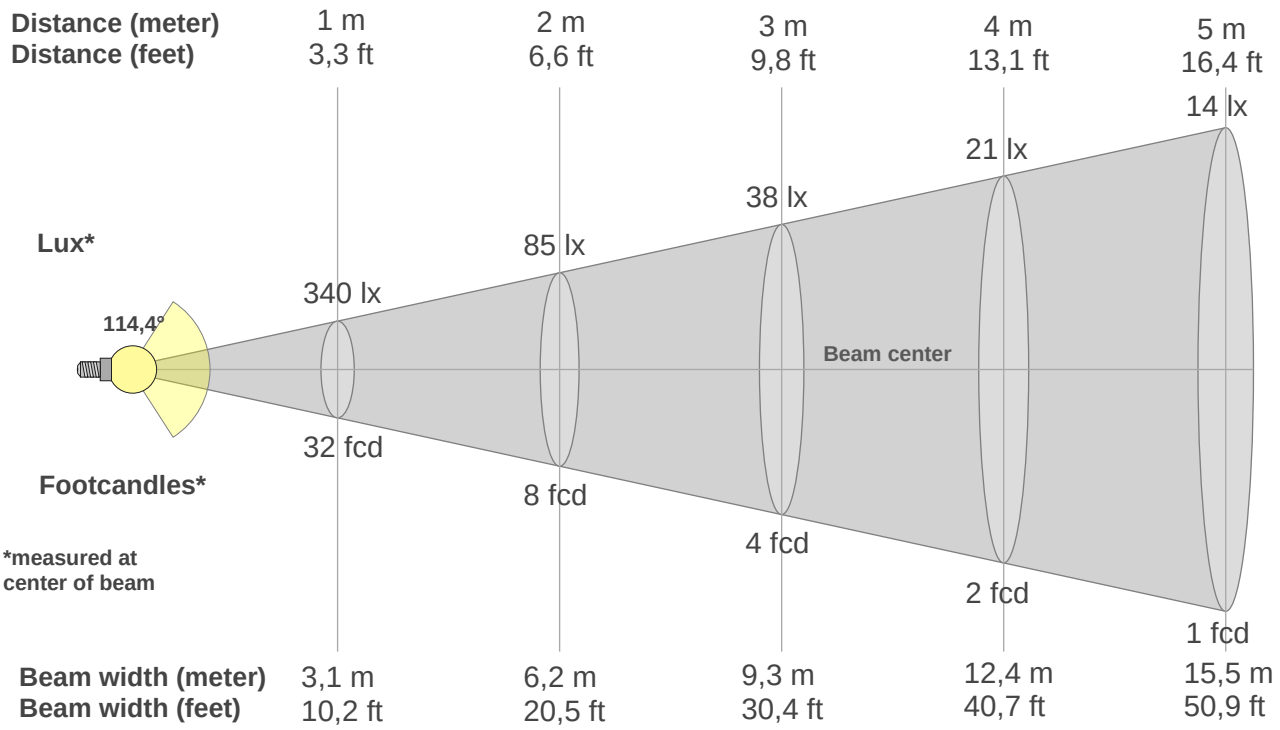








Beam details



Beam intensities from 1-20m

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	19,7ft	23ft	26,2ft	29,5ft	32,8ft	36,1ft	39,4ft	42,7ft	45,9ft	49,2ft	52,5ft	55,8ft	59,1ft	62,3ft	65,6ft
340lx	85lx	38lx	21lx	14lx	9lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
31,6fcd	7,9fcd	3,5fcd	2fcd	1,3fcd	0,9fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
340	338	333	325	316	303	290	272	253	230	208	177	142	102	63	33	16	7	2	0
100%	99%	98%	96%	93%	89%	85%	80%	74%	68%	61%	52%	42%	30%	19%	10%	5%	2%	0%	0%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
340	339	335	328	319	307	293	276	258	237	214	188	158	125	89	53	25	9	2	0
100%	99%	98%	96%	94%	90%	86%	81%	76%	70%	63%	55%	47%	37%	26%	16%	7%	3%	0%	0%

Intensities in 180° c-plane

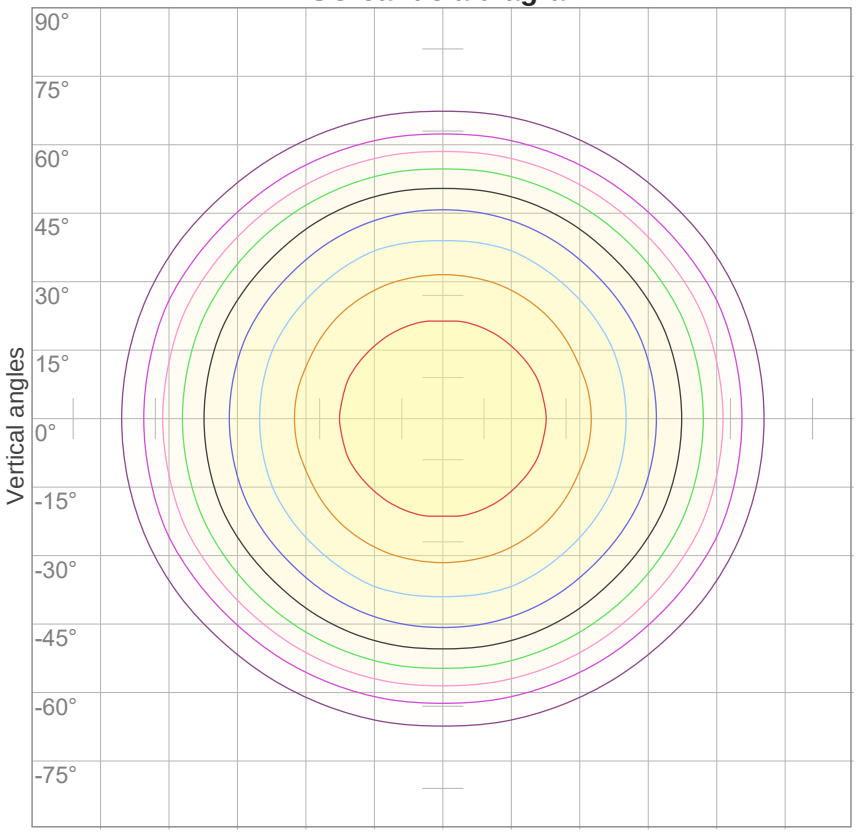
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
340	338	333	325	316	303	290	272	253	230	208	177	142	102	63	33	16	7	2	0
100%	99%	98%	96%	93%	89%	85%	80%	74%	68%	61%	52%	42%	30%	19%	10%	5%	2%	0%	0%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
340	339	335	328	319	307	293	276	258	237	214	188	158	125	89	53	25	9	2	0
100%	99%	98%	96%	94%	90%	86%	81%	76%	70%	63%	55%	47%	37%	26%	16%	7%	3%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
114,4°	**153,2°**	**169,6°**	**81,7%**	**55,2%**

ISO candela diagram



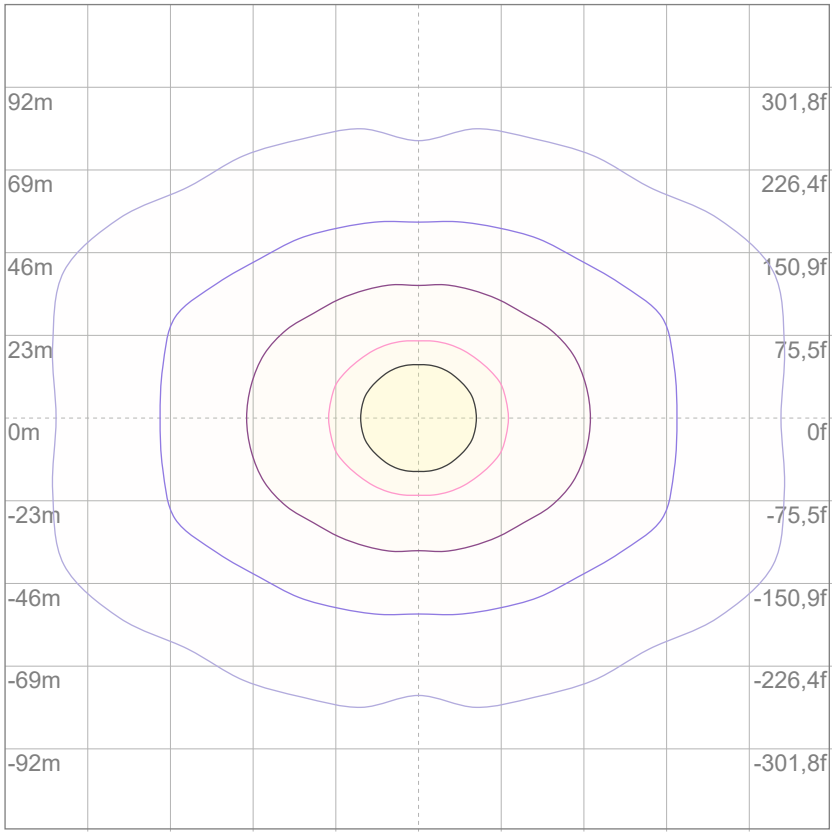
10%	34 cd
20%	68 cd
30%	102 cd
40%	136 cd
50%	170 cd
60%	204 cd
70%	238 cd
80%	272 cd
90%	306 cd

Conditions:

Number of c-planes: 16

Candela at center: 340 cd

ISO lux diagram



Mounting height: 10 meters (33 feet)

3%	0,102 lx
5%	0,170 lx
10%	0,340 lx
30%	1,02 lx
50%	1,70 lx

Conditions:

Number of c-planes: 16

Lux at center: 3,40 lx

Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

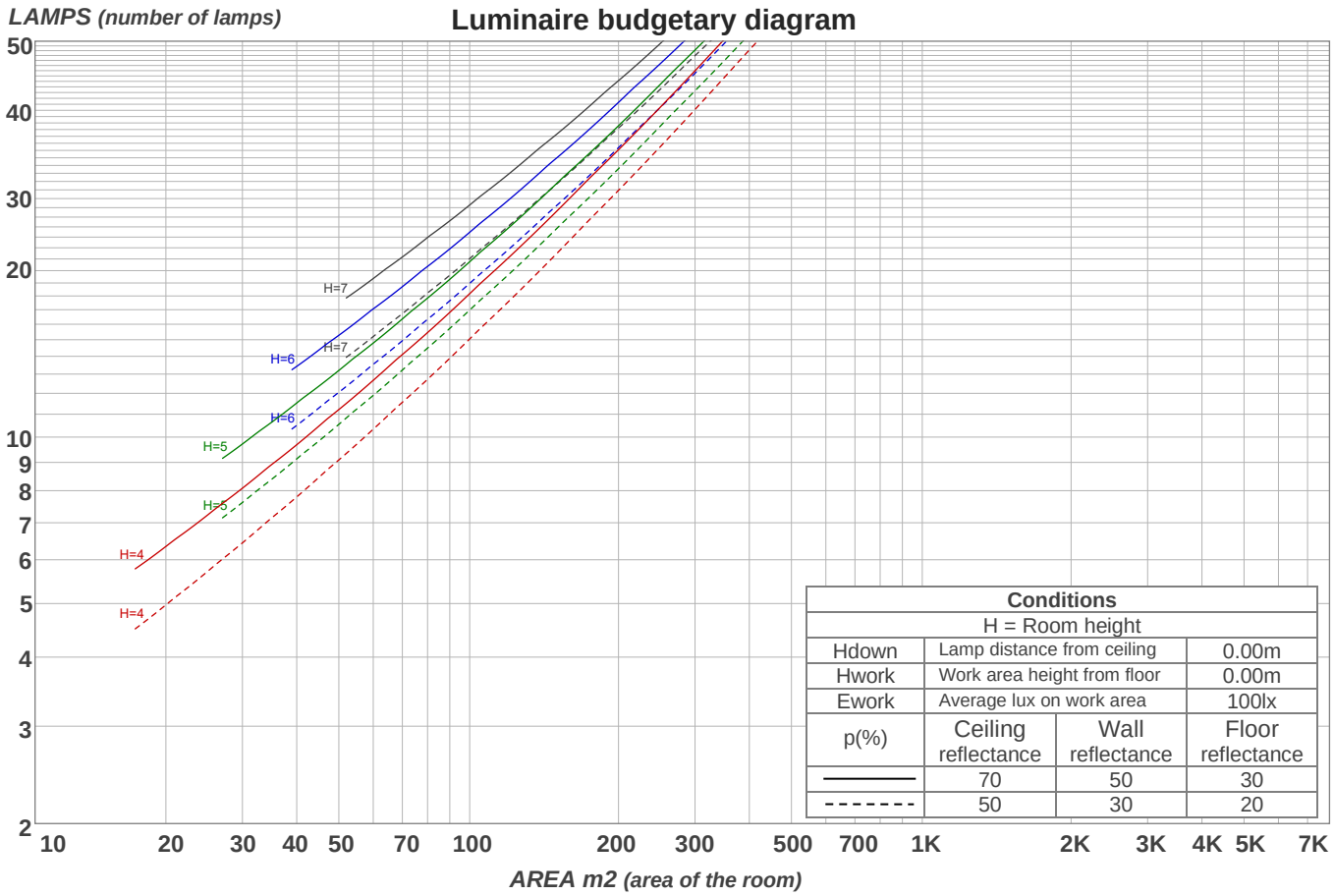
Glare Evaluation According to UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X	Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	23,3	24,5	23,5	24,8	25,0	24,2	25,4	24,4	25,7	25,9
	3H	24,0	25,3	24,4	25,5	25,7	25,5	26,7	25,9	27,0	27,2
	4H	24,2	25,4	24,6	25,6	25,9	25,9	27,1	26,3	27,3	27,6
	6H	24,3	25,3	24,6	25,6	26,0	26,2	27,2	26,5	27,5	27,8
	8H	24,2	25,2	24,6	25,5	26,0	26,2	27,2	26,5	27,5	27,9
	12H	24,2	25,2	24,6	25,5	26,0	26,2	27,1	26,5	27,5	27,9
4H	2H	23,8	25,0	24,3	25,3	25,5	24,6	25,8	25,0	26,0	26,3
	3H	24,8	25,8	25,2	26,1	26,6	26,1	27,1	26,5	27,4	27,9
	4H	24,9	25,8	25,4	26,2	26,8	26,5	27,4	27,0	27,8	28,4
	6H	25,0	25,9	25,5	26,2	26,6	26,8	27,6	27,3	28,0	28,3
	8H	25,0	25,8	25,5	26,1	26,5	26,8	27,6	27,3	28,0	28,3
	12H	25,0	25,6	25,5	26,0	26,5	26,8	27,5	27,3	27,9	28,4
8H	4H	25,1	25,9	25,6	26,2	26,6	26,6	27,3	27,1	27,7	28,1
	6H	25,2	25,8	25,7	26,3	26,8	26,9	27,5	27,4	27,9	28,5
	8H	25,3	25,8	25,8	26,3	26,9	27,0	27,5	27,5	28,0	28,7
	12H	25,3	25,7	25,8	26,2	26,8	27,0	27,5	27,6	28,0	28,6
12H	4H	25,1	25,7	25,6	26,1	26,6	26,5	27,2	27,0	27,6	28,1
	6H	25,2	25,7	25,8	26,3	26,9	26,9	27,4	27,4	27,9	28,6
	8H	25,3	25,7	25,8	26,2	26,8	27,0	27,4	27,6	27,9	28,5
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,2 / -0,2					0,1 / -0,1				
S = 1.5H		0,4 / -0,7					0,2 / -0,4				
S = 2.0H		1,1 / -1,7					0,8 / -1,0				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 956 lm total luminous flux											

Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio)				Room Values are expressed as percentage of Lumens delivered to the task surface													
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	38	32	27	38	31	27	37	31	26	25

Luminaire budgetary diagram

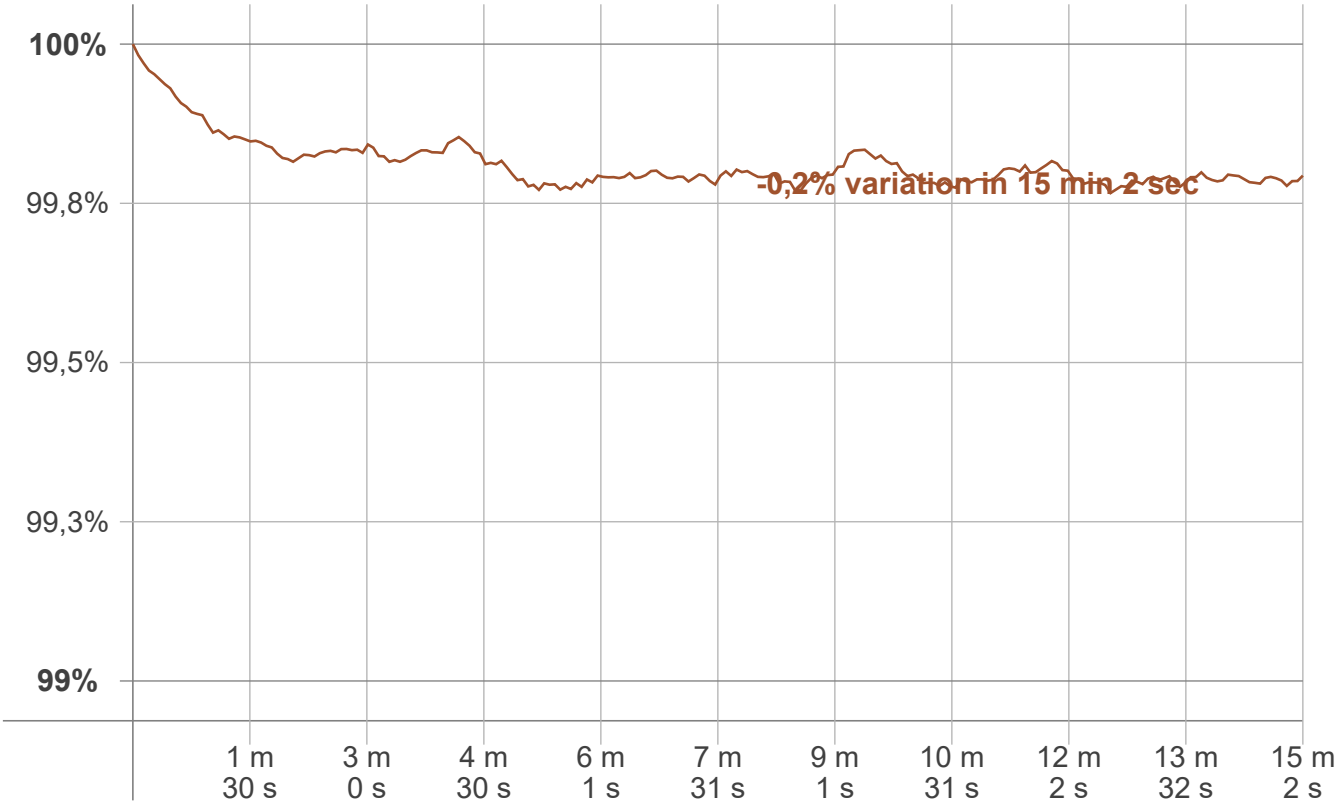


Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
32,1 lm	92,2 lm	141 lm	172 lm	181 lm	163 lm	113 lm	47,5 lm	10,2 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1,08 lm	0,738 lm	0,558 lm	0,476 lm	0,411 lm	0,334 lm	0,246 lm	0,150 lm	0,051 lm

Warmup curve



Warmup result

Warmup time:	**Lamp stabilized in 15 min 2 sec**
Warmup variation	**-0,2%**

Warmup conditions

Stable period:	**15 min**
Stable change max:	**2,0%**
Minimum time:	**15 min**

Color temperature change

CCT start	CCT change	CCT end
0 K	0 K	0 K

Output change

Output start	Output change	Output end
959 lm	-3 lm	956 lm